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ABSTRACT

The Design Group for the New Designs for the Comprehensive High School project used their first meeting to deliberate and make a keystone decision about the purpose and desired outcomes of the comprehensive high school. From a working paper by Pearce et al. (1991), the Design Group reviewed the history and current practices of aims and objectives for public schools as a way to look at possible learner outcomes. Keeping the 21st century as a target, the group interacted with a composite version of 1990 outcomes from carefully selected illustrations or examples of state and district outcomes. These examples represented ideas from the best in the current practice of outcome-based education. At the same time, the group considered two alternative sets of learner outcomes from Eisner (1991) and Giroux (1988). The Design Group determined that learner outcomes should: (1) be described in no more than one-half of a standard printed page in order to have a clear focus and provide direction to educators; (2) focus on the customers of the school; (3) survive tests from the stakeholders; (4) represent balanced attention to all areas of human talent and development; (5) involve reaching for a meaning of educational excellence that provides challenge and opportunity; and (6) convey the belief that they represent goals for all students. The group adopted the secondary outcomes developed by the Minnesota Board of Education. (YLB)

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LEARNER OUTCOMES: DESIGN SPECIFICATIONS AND SELECTED LEARNER OUTCOMES FOR THE COMPREHENSIVE HIGH SCHOOL OF THE FUTURE— CHOOSING THE KEYSTONE

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In considering the aims and objectives of education, decisions for the comprehensive high school are particularly problematic. The very nature of being comprehensive is sometimes taken to contradict a discernible focus for its educational programs. At certain times or in particular places the high school is harmonious with its community, crisp with purpose, and a fearless assembly of learners and teachers. In its most desirable state, the comprehensive high school offers all its secondary students a map and a choice of routes so that each student is able to select an educational program that encourages competence for the transition to post-secondary experiences (i.e., work, family life, college, or military services). In its actual state, clarity of purpose and goals have been obscured and overshadowed by uninformed choices using the shopping mall approach to the educational offerings, which lack relevance to students' lives.

The sharp contrast in many comprehensive high schools between the desired state of affairs and the current state of affairs is a practical problem characterized by a lack of focus. Resolving the problem of fuzziness in purpose is a central issue in redesigning the high school. The Design Group for New Designs for the Comprehensive High School. used their first meeting to deliberate and make a keystone decision about the purpose and desired outcomes of the comprehensive high school.

The Keystone Decision

The choice of the word *keystone* is an apt adjective for the type of decision that had to be made by the design group. A keystone is a wedged-shaped piece at the crown of an arch that locks the other pieces into place. When the word is used to describe the quality of a decision for an educational design problem, it suggests a uniquely important decision upon which all associated decisions will depend for support. Once the decision about the desired learner outcomes for the comprehensive high school is made, it will support subsequent decisions about the learning process (i.e., curriculum, instruction, assessment), as well as decisions about school organization, staffing, partnerships, and costs.

The choice of the word keystone is important for a second reason. A keystone is visible at the top of an arch and often is chosen for its aesthetic qualities as well as for its functional qualities. It appeared to be a word better suited to the work of a design group than other choices such as *foundations* or *building blocks*.

Thinking in terms of the aesthetic qualities also increases the possibilities for the representational forms of the design conceptualization. In representational form, the desired learner outcomes for a secondary school become the expressed mission or vision for the school. The difference between keystone and foundational decisions about the purposes of school is illustrated by the following story:

One member of the group told a story about visits with high school principals that illustrated the difference between highly visible and invisible school mission statements. When asked about the mission of the particular high school, typically the principal of a comprehensive high school pulled the mission statement—if one existed at all—out of a drawer. Teachers and students often could not articulate the mission nor was it visibly and forcefully displayed in the school building.

In contrast, the story teller went on, the missions of the twelve exemplary urban career-oriented high schools, as reported by Mitchell, Russell, and Benson (1989) were visible and concisely expressed; they were identifiable and could be expressed by students and staff alike.

This story suggests that the mission statements of many comprehensive high schools often exist as foundation blocks in a figurative and literal sense. The statements may serve as a base to build upon, but are not visible to any of the stakeholders of the school and few can state the words in the statement. In addition, as the statements are "buried" there is no reason to consider the aesthetic qualities of the statements. They do not invite discussion about their goodness nor their ability to inspire and motivate the imaginative efforts of the people in the school. In contrast, the mission statements in the exemplary schools are visible. Much like the keystone, they support and enhance the qualities of the school.

Forms of Representation

When the practical problem of designing learner outcomes is approached constructively and aesthetically, there is an opportunity to discuss the desired outcomes of learning and the inspired, creative, and attractive "forms of representation," a phrase that Eisner (1982) uses to refer to the "vehicles through which concepts that are visual, auditory, kinesthetic, olfactory, gustatory, and tactile are given public status. Public status might take the form of words, pictures, music, mathematics, dance, and the like" (p. 47).

Eisner's ideas about concepts and their representational forms encouraged the Design Group to consider a broader conceptualization of learner outcomes and more choices in the ways that they will be publicly represented. The final result may look more like an architect's sketch book containing several school design archetypes rather than an engineer's blueprint for a unique construction.

The on-going and somewhat public collaboration of the Design Group also has the potential to generate ideas that were not identified originally in the design problem. Eisner explains about approaching conceptual work aesthetically:

> [It] is a matter of qualitative negotiation. Although the work might have been initiated as a desire to impose a concept upon pliable material, the work itself gradually begins to *participate* in the negotiations. Gradually the work *tells* the artist what is needed. What may have been begun as a lecture becomes a conversation. What may have been started as a monologue becomes a dialogue. It should not be surprising that the process itself yields ideas that were not a part of the initiating conception. (p. 51)

The Search for Good Learner Outcomes

From a working paper by Pearce, Beck, Copa, and Pease (1991) the Design Group reviewed the history and current practices of aims and objectives for public schools as a way to look at possible learner outcomes. Keeping the twenty-first century as a target, the group interacted with a composite version of 1990 outcomes from carefully selected illustrations or examples of state and district outcomes . These examples represented ideas from the best in the current practice of outcome based education (OBE). At the same time the group considered two alternative sets of learner outcomes from Eisner (1991) and Giroux (1988).

Examples of State and School District Learner Outcomes

The composite version of 1990 outcomes resulted from one approach to analyzing the examples from several sources: (a) high profile OBE districts located in Johnson City, New York; Glendale, Arizona; Arlington Heights, Illinois; and Rochester, Minnesota, and from states such as Minnesota and Connecticut; (b) well-known national reports such as *A Nation at Risk*, *The Forgotten Half*, *America's Choice: High Skills or Low Wages*, and *Workplace Basics*; (c) reports from the National Center for Research in Vocational Education (NCRVE) (e.g., *Exemplary Urban Career-oriented Secondary School Programs* by Mitchell, Russell, & Benson, 1989) and individuals who generally receive recognition for their knowledge of the practices of secondary schooling in the United States such as John Goodlad, Theodore Sizer, Ernest Boyer, and Jeannie Oakes.

The project staff identified the desired learner outcomes in the above work, wrote the outcomes on one-to-a-note-card, sorted the note cards into groups of like outcomes, then selected samples from each of the groups. The outcomes seemed to fall into six groups[1]; two discipline specific groups (knowledge and application) and four areas of personal development (i.e., personal, social/civic, vocational, and physical). When constructed this way, our list turned out to be hearty—there was a bit of everything—but bland and uninspired, much like the hot dishes that Garrison Keillor described in his stories about life in Lake Wobegon.

Learner Outcomes—Alternatives

The Design Group set the bland outcomes aside and examined two seemingly more provocative sets of outcomes. Eisner (1991) proposed six aims that count in schools: (a) teaching children that the exploration of ideas is sometimes difficult, often exciting, and occasionally fun; (b) helping youngsters learn how to formulate their own problems and how to design the tactics and strategies to solve them; (c) developing in the young multiple forms of literacy (the ability to encode or decode meaning in any of the forms used in the culture to represent meaning); (d) teaching the young the importance of wonder and imagination; (e) helping children realize that they are part of a caring community; and (f) teaching children that they have a personal signature.

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[1]Outcomes for aesthetic learning might have been a seventh group. We found only five examples of outcomes that we considered unique in purpose. We decided to include them with the group we called "knowledge of disciplines."

Giroux (1988) also proposed four aims for the high school from a critical theory perspective. These were (a) helping students to differentiate between the notions of directive (concerned with ends) and productive (concerned with means) knowledge; (b) making explicit the traditional hidden curriculum (unstated norms, values, and beliefs that are transmitted to students through the underlying structure of a given class); (c) helping students develop a critical, political consciousness, including the joys and responsibilities of full civic participation; and (d) helping students become conscious of their own frames of reference. Some of the ideas expressed by these sets of learner outcomes were bolder and in some respects more appealing to the Design Group members than the composite set of outcomes described earlier.

Problems Concerning Developmental Nature of Learning

At this point, Design Group members brought two concerns to the surface. The first concern had to do with the developmental nature of learning, learners, and educational settings. It was suggested that a good set of learner outcomes, whether it represented the best in current practice or a better vision for the future, must be strong enough to support the growth and development of all students and maintain the evolution of systems of schooling over at least a decade. The Design Group expressed a need to find outcomes for comprehensive secondary schools that were cognizant of adolescent development and the ecology of school systems, and at the same time created a coherent, yet bold and focused, vision for the school design.

About the first concern, the Design Group returned to the findings of John Goodlad (1984). Goodlad and his research team had examined mission statements and learning objectives from states and districts throughout the United States. His findings brought together the purposes of school that are common to the United States experience and the developmental needs of students. At the beginning of the twentieth century the purpose of the high school was to prepare a relatively small elite group of students for efficient entry into higher education schools. In the next century the secondary school must serve almost all adolescents over the age of fourteen; and according to Goodlad, help students pursue their academic, vocational, social, civic, cultural, and personal goals.

The second concern focused on the process of examining disjoined learner outcomes from several states and districts. When the example outcomes from districts, states, experts, and national reports were first separated and then reconstructed, they

appeared disjointed and frequently the original meaning of the outcomes was partially lost. The resulting categories did not seem to be a true reflection of the intent of the original outcomes. The Design Group looked for an example from one source that could serve as a starting point.

A Keystone Decision

The Design Group and the research team came to sense together—one way to think about its working definition of consensus—that it was time to make a preliminary decision about desired learner outcomes. It was time to make the keystone decision.

Design Specifications of Learner Outcomes

The following design specifications were established as useful for making the decision:

1. *Learner outcomes should be able to be described in no more than one-half of a standard printed page.* A short statement has some opportunity to be of clear focus and provide direction to educators. If a verbose list of goals or outcomes is produced, as some of the states and districts have done, then almost any list becomes acceptable. Long lists of outcomes do little more than pan the horizon without focusing on what is most interesting and important. Lengthy inventories also tend to obscure rather than sharpen the focus. Long, fuzzy lists make the keystone less clearly visible and its good qualities are obscured.

2. *Learner outcomes should focus on the customers of the school.* Just who the customers are needs more discussion. Is it students? Parents? Post secondary educational institutions? Other teachers? American business enterprises? All citizens? The people of other nations? The Design Group members represented several of the interests of the above stakeholders. The preliminary specification was to put students' wants and needs as a primary focus, and at the same time, recognize that other groups have legitimate interests to be represented.

3. *Learner outcomes should survive tests from the stakeholders.* The goals of *America 2000* offer one test of political reality. The school organization

recommendations from *America's choice: High skills or low wages?* offer another test. Other tests to consider are student performance indicators, the Gallup Poll of citizens, and goals of academic discipline groups such as the National Council of Teachers of Mathematics.

4. *Learner outcomes should represent balanced attention to all areas of human talent and development.* Learner outcomes for the academic and vocational goals should be integrated to indicate that both are important for functioning in today's complex society. To continue to refer to academic outcomes and vocational outcomes works to maintain the dichotomy.

5. *Learner outcomes should involve reaching for a meaning of educational excellence that provides challenge and opportunity, perhaps beyond our present grasp.* For example, a more conservative set of outcomes implies that we can produce and account for our promises with little risk. Another set of outcomes may represent higher purposes but be less measurable and thereby involve more risk. If we allow the current knowledge of measurement in educational psychology to limit our aims, then we have, in essence, proscribed our vision for student learning by a single aspect of a complex and dynamic process.

6. *Learner outcomes should convey the belief that they represent goals for all students.* At the same time, the learner outcomes should not be seen as minimums; many students should be encouraged and expected to express the outcomes in more accomplished and creative ways. To reach these learning expectations for all students will mean considerable effort to expand the flexibility and diversity in the learning process (i.e., curriculum, instruction, and assessment) and support services for students.

The Adopted List

Considering the above decision specifications, the Design Group agreed to adopt the learner outcomes which follow to guide the project at this stage. The list has some limitations, which need to be kept in mind, but it is a representation of the best available thinking and process of learner outcome development. As of July, 1991, Minnesota was

the only state to have legislated outcome based education for its public schools. These outcomes are the result of over two years of work by several hundred Minnesota citizens (i.e., professional educators and many others). Minnesota's outcomes also include working definitions, lists of competencies under each outcome, requirement for a personal learning plan, a three-level performance scale (i.e., adept, advanced, and exemplary), and demand for a comprehensive plan for verification of achievement.

The Design Group concluded from its research—much as Spady announced at a 1991 Outcome Based Education conference in Colorado—that the Minnesota list is about the best we have *right now*. For purposes of guiding the design work, it was chosen to be the keystone; it will serve to support and envision the next phases of the work.

The Minnesota State Board of Education (April, 1991) adopted the following Secondary Graduation Outcomes: As of that time, Minnesota was the only state that legislated outcome-based education for all K-12 public schools.

Secondary Graduation Outcomes

In order to lead productive fulfilling lives in a complex and changing society and to continue learning:

> *The graduate shall demonstrate the knowledge, skills, and attitudes essential to:* (a) communicate with words, numbers, visuals, symbols and sounds; (b) think and solve problems to meet personal, social, and academic needs; (c) contribute as a citizen in local, state, national, and global communities; (d) understand diversity and the interdependence of people; (e) work cooperatively in groups and independently; (f) develop physical and emotional well-being; and (g) contribute to the economic well-being of society.

Checking the Outcomes Against the Design Specifications

How does the adopted list of learner outcomes stand up to the above design specifications? First, the learner outcomes list is no longer than one-half page. Together with related support materials, it is focused enough to provide direction for educators. Second, the list suggests that the learner is the key customer of public secondary school;

yet it recognizes the interests of local, state, national, and global communities and the need to understand diversity. The third specification, surviving tests of reality such as the one offered by the goals of *America 2000*, will be better measured in retrospect, although the list clearly calls for competency attainment; the OBE philosophy versus the Carnegie unit approach of *A Nation at Risk*.

The fourth specification called for outcomes that represented balanced attention to all areas of human talent and development, particularly for integrated academic and vocational outcomes. Integrated and developmental learning can be facilitated with the adopted list. Although some readers may interpret item (g) to be a vocational outcome and item (a) to be primarily academic goals, nothing in the language establishes the dichotomy the Design Group was seeking to avoid.

The Design Group was not certain that it had satisfied specification five (i.e., finding the *right* place between feasibility and challenge) and specification six (i.e., all students reaching the outcomes and more students reaching beyond the minimums). Perhaps the adopted list of outcomes is too conservative; too safe. Minnesota's Board of Education was clear in not wanting to be held responsible for outcomes that they can not now deliver or measure by today's measurement technology. In this respect, the list may not stimulate higher meanings of educational excellence.

A Final Point

Earlier the Design Group had proposed candidates for a school signature. As the effort to represent the most desired learner outcomes for the comprehensive high school of the future continues, one other interaction must take place; that interaction is between our school's signature and its design specifications.

The initial symbolic ideas include the freedom and opportunity of a soaring eagle, the learning community found in the one room school, the power of the integrated silicon chip, the potential and persistence suggested by the concept of hope, and the new possibilities inherent in a sunrise. The Design Group expressed a wish to continue to incorporate ideas about caring and connected communities and student empowerment through critical examination of the hidden curriculum in a school symbol. In addition, the group will search for the words, concepts, and actions that will drive the integration of academic and vocational outcomes.

Summary

The desired learner outcomes for New Designs for the Comprehensive High School should serve as intellectually and morally sound statements of the purposes of schooling for the important stakeholders of the comprehensive high school. Learner outcomes should: (a) be described in no more than one-half of a standard printed page in order to have a clear focus and provide direction to educators; (b) focus on the customers of the school—students and communities are important customers to consider; (c) survive tests from the stakeholders—the goals of *America 2000* currently offer a test of political reality; (d) represent balanced attention to all areas of human talent and development—the academic and vocational outcomes should be integrated to indicate that both are important for functioning in today's complex society; (e) involve reaching for a meaning of educational excellence that provides challenge and opportunity, perhaps beyond our present grasp; and (f) convey the belief that they represent goals for *all* students who will be expected to pass through the graduation arch possessing more proficiency.

At this stage of the design process, the Design Group has adopted the secondary outcomes that were developed by the Minnesota Board of Education, recognizing that the list is more timid than the Design Group would like and the aesthetic representations are not as deliberate as our school signatures would suggest. However, it was agreed that the following list is a solid beginning:

In order to lead productive fulfilling lives in a complex and changing society and to continue learning:

> *The graduate shall demonstrate the knowledge, skills, and attitudes essential to:* (a) communicate with words, numbers, visuals, symbols and sounds; (b) think and solve problems to meet personal, social, and academic needs; (c) contribute as a citizen in local, state, national, and global communities; (d) understand diversity and the interdependence of people; (e) work cooperatively in groups and independently; (f) develop physical and emotional well-being; and (g) contribute to the economic well-being of society.

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